

PROPOSAL 161

5 AAC 85.045(18). Hunting seasons and bag limits for moose.

Reauthorize the antlerless moose hunting seasons in Unit 20D as follows:

(18) hunting seasons and bag limits for moose in Unit 20 are as follows:

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
...		
Unit 20(D), that portion lying west of the west bank of the Johnson River and south of the north bank of the Tanana River, except the Delta Junction Management Area and the Bison Range Controlled Use Area		
RESIDENT HUNTERS:		
...		
1 antlerless moose, per lifetime of a hunter, by youth hunt drawing permit only; up to 100 permits may be issued may be issued in combination with those portion in the Delta Junction Management Area and the Bison Range Controlled Use Area; a person may not take a calf or a cow accompanied by a calf;	Sept. 16 – Sept. 25 (General hunt only)	
1 antlerless moose by registration permit only; a person may not take a calf or a cow accompanied by a calf	Oct. 10 - Nov. 25 (General hunt only)	
...		
Unit 20(D), that portion within the Bison Range Controlled Use Area		

...

1 antlerless moose, per lifetime of a hunter, by youth hunt drawing permit only; up to 100 permits may be issued in Unit 20(D) lying west of the west bank of the Johnson River and south of the north bank of the Tanana River and the Delta Junction Management Area; a person may not take a calf or a cow accompanied by a calf;

Sept. 16 – Sept. 25
(General hunt only)

Unit 20(D), that portion within the Delta Junction Management Area

RESIDENT HUNTERS:

...

1 antlerless moose, per lifetime of a hunter, by youth hunt drawing permit only; up to 100 permits may be issued Unit 20(D) lying west of the west bank of the Johnson River and south of the north bank of the Tanana River and the Bison Range Controlled Use Area; a person may not take a calf or a cow accompanied by a calf;

Sept. 16 – Sept. 25
(General hunt only)

1 moose every four regulatory years by drawing permit a person may not take a calf or a cow accompanied by a calf; or

Sept. 1 - Sept. 15
(General hunt only)

...

1 antlerless moose by registration permit only; a person may not take a calf or

Oct. 10 - Nov. 25
(General hunt only)

a cow accompanied by a calf

NONRESIDENT HUNTERS:

1 moose every four regulatory years by drawing permit only, a person may not take a calf or a cow accompanied by a calf; or

Sept. 1 - Sept. 15

...

What is the issue you would like the board to address and why? Antlerless moose hunts must be reauthorized annually. The objectives of the Unit 20D antlerless moose hunts are to 1) stabilize population growth of this high-density moose population; 2) address concerns about range degradation, reduced nutritional condition of moose, and reduced reproductive success of moose; 3) make progress toward meeting the Unit 20D intensive management (IM) harvest objective of 500–700 moose; and 4) provide youth and disabled veteran hunting opportunity. These objectives are being met.

If antlerless moose hunts are not reauthorized, the moose population could quickly increase to levels beyond the ability of the habitat to support the moose population. Allowing the population to grow beyond what the habitat can support may require the population to be reduced dramatically to avoid long term habitat damage. Opportunity to hunt a harvestable surplus of cow moose would be lost, and the ability to meet IM harvest objectives could be compromised.

Antlerless moose hunts are offered in southwest Unit 20D, which has the highest moose density in the unit. This area has great potential for population growth due to an abundance of high-quality moose habitat created from extensive land clearing for agricultural use and multiple wildfires over the past 40 years. Total moose harvest in all of Unit 20D averaged 146 bull moose during regulatory years 2020 and 2021. No antlerless moose were harvested in regulatory year (RY) 22 or RY23 as the moose population experienced a 40% decline as a result of the severe winter of 2021 – 2022. However, the population has begun to rebound, and a very small antlerless hunt is planned for RY24 with less than 20 tags issued.

Antlerless hunting opportunity and harvest is limited at present to help maintain this moose population at current densities and within habitat carrying capacity. The largest antlerless harvest (n=510) occurred in Unit 20D in 2007, when antlerless hunts were first authorized to reduce population size and address moose nutritional concerns. Since 2011, the southwest Unit 20D population estimates (range = 2,500–4,500 moose) and bull harvest in southwestern Unit 20D (201–282) have been stable. The 2022 population estimate for southwest Unit 20D was 2,459 moose (corrected for sightability) with a density of 1.94 moose per square mile, 28 calves:100 cows and 23 bulls:100 cows. The 2022 population estimate is 40% lower than the 2020 estimate, likely due to increased mortality as a result of severe winter conditions during 2021–2022, which included deep snow and winter rain events. The Department of Fish and Game does expect nutritional indices to improve because of fewer moose on the landscape relative to habitat capacity. This process is already evident as the 2023 population estimate of 3,555 moose was an increase

compared to 2,459 moose in 2022. In order to prevent the moose population from experiencing nutritional stress in future years, a few antlerless permits will be warranted annually going forward.

Continued antlerless harvest will likely be needed to maintain this population at the optimal density relative to habitat constraints and will contribute additional harvest toward meeting the IM harvest objective of 500–700 moose without reducing bull-to-cow ratios below management objectives. The current population trend suggests that low, consistent antlerless harvest provided by drawing permit hunts in Unit 20D, in conjunction with other mortality factors (including ceremonial harvest, vehicle collision, accidents, and predation), is appropriate to maintain population stability.

The department will continue to evaluate antlerless moose hunts and their effect on moose density and population growth. Future antlerless moose hunts will be implemented as needed based on the evaluation of the following three indices of density-dependent moose nutritional conditions in relation to changes in moose density: biomass removal of current annual growth on winter browse, proportion of females with twin calves, and late-winter calf weights.

Additional drawing or registration permits will be issued only if more harvest is needed in specific areas to maintain optimal moose densities.

PROPOSED BY: Alaska Department of Fish & Game (HQ-F24-053)
